



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,771	01/30/2004	Derek Bergin	100204673-1	5546

22879 7590 12/29/2006
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

PUENTE, EMERSON C

ART UNIT	PAPER NUMBER
----------	--------------

2113

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/767,771		BERGIN, DEREK	
	Examiner		Art Unit	
	Emerson C. Puente		2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is made **Non-Final**.

Claims 1-28 have been examined.

Specification

The abstract of the disclosure is objected to because the abstract is not in a single paragraph of 150 words or less. Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 7,14,21, and 28 objected to because of the following informalities:

In regards to claim 7,14,21, and 28, please change “the distilled results are” to “the distilled result is”. Base claims 1,8,15, and 22 disclose only “a distilled result”. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In regards to claim 22-28, the claimed “machine readable medium” as described in the specification page(s) 17-18 paragraph 67, includes, among other examples, propagated signals either with or without carrier waves, which is nonstatutory. As such, the claim is not limited to

Art Unit: 2113

statutory subject matter and is therefore non-statutory. Examiner suggests amending “A machine readable medium ...” to “A machine readable **storage** medium ...”.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 recites the limitation "the sending" in line 1 of claim. There is insufficient antecedent basis for this limitation in the claim. Base claim 1 cites “sending signal bits” and base claim 3 cites “sending a communication”. Examiner is uncertain whether “the sending” cited in claim 4 is in reference to “sending signal bits” as cited in base claim 1 or “sending a communication” as cited in base claim 3. For purpose of examination, examiner interprets “the sending” in reference to “sending a communication” as recited in base claim 3.

Claim 11 recites the limitation "the sending" in line 1 of claim. There is insufficient antecedent basis for this limitation in the claim. Base claim 8 cites “sending signal bits” and base claim 10 cites “sending a communication”. Examiner is uncertain whether “the sending” cited in claim 11 is in reference to “sending signal bits” as cited in base claim 8 or “sending a communication” as cited in base claim 10. For purpose of examination, examiner interprets “the sending” in reference to “sending a communication” as recited in base claim 10.

Claim 25 recites the limitation "the sending" in line 1-2 of claim. There is insufficient antecedent basis for this limitation in the claim. Base claim 22 cites “sending signal bits” and base claim 24 cites “sending a communication”. Examiner is uncertain whether “the sending” cited in claim 25 is in reference to “sending signal bits” as cited in base claim 22 or “sending a

communication” as cited in base claim 24. For purpose of examination, examiner interprets “the sending” in reference to “sending a communication” as recited in base claim 24.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4,6-11,13-17,20-25, 27, and 28 rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication 2004/0255291 of Gupton et al. referred hereinafter “Gupton”.

In regards to claim 1, Gupton discloses a method for testing software, the method comprising:

receiving a plurality of test-modules associated with an external system and organized into a sequence. Gupton discloses a sequence editor for creating a test executive sequence (see page 7 paragraph 108).

each test-module including at least one software-targeted testing-inquiry that generates a plurality of intermediate results, the test module returning a distilled result based upon the

intermediate results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

receiving one or more rules to which at least one of the test-modules in the sequence is subject, application of each rule having one or more outcomes, at least one outcome for each rule being the determination of the next test-module to be administered, each rule including one or more actions conditioned upon the distilled result returned by the corresponding test module, the one or more conditioned actions being configurable to be a branch out of the sequence to a predetermined test-module. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

administering the sequence of test-modules sequentially except where a branch is invoked to administer the sequence from another point in the sequence. Gupton disclose executing a sequence, wherein a user can configure some steps to be skipped (see page 8 paragraph 114)

the administering of a current test-module including
executing the current test-module, the executing including sending signal bits to the external system. Gupton discloses collecting the execution results of the steps (see page 8 paragraph 114).

applying, if the current test-module is subject to one or more rules, such one or more rules. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

In regards to claim 2, Gupton discloses the claim limitations as discussed above. Gupton further discloses

receiving commands to arrange a portion of the plurality of test-modules to create the sequence of test-modules. Gupton disclose a sequence editor may have a GUI for enabling a user to efficiently create a test executive sequence (see page 7 paragraph 108).

receiving commands to associate at least one condition and at least one action to at least one test-module of the sequence of test-modules. Gupton discloses a user may configure some steps to be skipped depending on execution results of previous steps (see page 8 paragraph 114).

In regards to claim 3 and 4, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein, the action is at least one of

sending a communication, wherein, the sending may be executed using at least one of mailing, Emailing, paging, and phoning.

aborting,

skipping a test-module in the test-module sequence,

repeating a test-module,

branching, and

executing a program.

Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114), indicating skipping a test-module in the test-module sequence and branching. Examiner notes since claim cites at least one, prior art needs only one of the features to meet the claim limitations.

In regards to claim 6, Gupton discloses the claim limitations as discussed above. Gupton further discloses associating a test-module identification value for each test-module in the sequence, the test-module identification value corresponding to an order of the test-module

sequence. Gupton discloses creating a test executive sequence (see page 7 paragraph 108), and further defines a sequence as a series of steps that the user specifies for execution in a particular order (see page 1 paragraph 11). In order for a series of steps to execute in a particular order, there must be a value associated with each step or test module identifying its order in the sequence.

In regards to claim 7, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein the distilled results are determined based on a synthesis of values of the plurality of intermediate software-targeted testing-inquiry results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

In regards to claim 8, Gupton discloses a system that tests software, the system comprising:

means for receiving a plurality of test-modules associated with an external system and organized into a sequence. Gupton discloses a sequence editor for creating a test executive sequence (see page 7 paragraph 108).

each test-module including at least a software-targeted testing-inquiry that generates a plurality of intermediate results, the test module returning a distilled result based upon the results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

means for receiving one or more rules to which at least one of the test-modules in the sequence is subject, application of each rule having one or more outcomes, at least one outcome

Art Unit: 2113

for each rule being the determination of the next test-module to be administered, each rule including one or more actions conditioned upon the distilled result returned by the corresponding test module, the one or more conditioned actions being configurable to be a branch out of the sequence to a predetermined test-module. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

means for administering the sequence of test-modules sequentially except where a branch is invoked to administer the sequence from another point in the sequence. Gupton disclose executing a sequence, wherein a user can configure some steps to be skipped (see page 8 paragraph 114).

the administering of a current test-module including

executing the current test-module, the executing including sending signal bits to the external system. Gupton discloses collecting the execution results of the steps (see page 8 paragraph 114).

applying, if the current test-module is subject to one or more rules, such one or more rules. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

In regards to claim 9, Gupton discloses the claim limitations as discussed above. Gupton further discloses

means for receiving commands to arrange a portion of the plurality of test-modules to create the sequence of test-modules. Gupton disclose a sequence editor may have a GUI for enabling a user to efficiently create a test executive sequence (see page 7 paragraph 108).

means for receiving commands to associate at least one condition and at least one action to at least one test-module of the sequence of test-modules. Gupton discloses a user may configure some steps to be skipped depending on execution results of previous steps (see page 8 paragraph 114).

In regards to claim 10 and 11, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein, the action is at least one of

sending a communication, wherein the sending may be at least one of mailing, Emailing, paging, and phoning.

aborting,

branching,

repeating a test,

executing a branch, and

executing a program.

Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114), indicating skipping a test-module in the test-module sequence and branching. Examiner notes since claim cites at least one, prior art needs only one of the features to meet the claim limitations.

In regards to claim 13, Gupton discloses the claim limitations as discussed above. Gupton further discloses means for associating a test identification value for each of the test-modules of the sequence, the test identification value corresponding to the order of the test sequence. Gupton discloses creating a test executive sequence (see page 7 paragraph 108), and further defines a sequence as a series of steps that the user specifies for execution in a particular order (see page 1

Art Unit: 2113

paragraph 11). In order for a series of steps to execute in a particular order, there must be a value associated with each step or test module identifying its order in the sequence.

In regards to claim 14, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein the distilled results are determined based on a synthesis of values of the plurality of intermediate software-targeted testing-inquiry results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

In regards to claim 15, Gupton discloses a system that tests software comprising:

a results database. Gupton discloses collecting the execution results of the steps (see page 8 paragraph 114).

a test engine configured to receive a plurality of test-modules associated with an external system and organized into a sequence. Gupton discloses a sequence editor for creating a test executive sequence (see page 7 paragraph 108).

each test-module including a software-targeted testing-inquiry that generates a plurality of intermediate results, the test module returning a distilled result based upon the results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

the test engine further receiving one or more rules to which at least one of the test-modules in the sequence is subject, application of each rule having one or more outcomes, at least one outcome for each rule being the determination of the next test-module to be administered, each rule including one or more actions conditioned upon the distilled result

Art Unit: 2113

returned by the corresponding test module, the one or more conditioned actions being configurable to be a branch out of the sequence to a predetermined test-module. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

the test engine further administering the sequence of test-modules sequentially except where a branch is invoked to administer the sequence from another point in the sequence. Gupton discloses executing a sequence, wherein a user can configure some steps to be skipped (see page 8 paragraph 114).

the administering of a current test-module including
executing the current test-module, the executing including sending signal bits to the external system. Gupton discloses collecting the execution results of the steps (see page 8 paragraph 114)

applying, if the current test-module is subject to one or more rules, such one or more rules. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

In regards to claim 16, Gupton discloses the claim limitations as discussed above. Gupton further discloses a test management system configured to

receive a plurality of test-modules, receive commands to arrange a portion of the plurality of test-modules to create the sequence of test-modules Gupton discloses a sequence editor may have a GUI for enabling a user to efficiently create a test executive sequence (see page 7 paragraph 108).

receive commands to associate at least one condition and at least one action to at least one test-module of the sequence of test-modules. Gupton discloses a user may configure some steps to be skipped depending on execution results of previous steps (see page 8 paragraph 114).

In regards to claim 17, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein, the action is at least one of sending a communication, aborting, skipping a test-module in the test-module sequence, repeating a test-module, executing a branch, and executing a program. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114), indicating skipping a test-module in the test-module sequence and branching. Examiner notes since claim cites at least one, prior art needs only one of the features to meet the claim limitations.

In regards to claim 20, Gupton discloses the claim limitations as discussed above. Gupton further discloses an associating system that associates a test-module identification value for each of the plurality of test-modules, the test-module identification value corresponding to the order of the test-module sequence. Gupton discloses creating a test executive sequence (see page 7 paragraph 108), and further defines a sequence as a series of steps that the user specifies for execution in a particular order (see page 1 paragraph 11). In order for a series of steps to execute in a particular order, there must be a value associated with each step or test module identifying its order in the sequence.

In regards to claim 21, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein the distilled results are determined based on a synthesis of values of the plurality of intermediate software-targeted testing-inquiry results. Gupton discloses skipping

Art Unit: 2113

steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

In regards to claim 22, Gupton discloses a machine readable medium including instructions executed by a computer, the instructions comprising:

receiving a plurality of test-modules associated with an external system and organized into a sequence. Gupton discloses a sequence editor for creating a test executive sequence (see page 7 paragraph 108).

each test-module including at least a software-targeted testing-inquiry that generates a plurality of intermediate results, the test module returning a distilled result based upon the intermediate results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

receiving one or more rules to which at least one of the test-modules in the sequence is subject, application of each rule having one or more outcomes, at least one outcome for each rule being the determination of the next test-module to be administered, each rule including one or more actions conditioned upon the distilled result returned by the corresponding test module, the one or more conditioned actions being configurable to be a branch out of the sequence to a predetermined test-module. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

administering the sequence of test-modules sequentially except where a branch is invoked to administer the sequence from another point in the sequence. Gupton disclose

Art Unit: 2113

executing a sequence, wherein a user can configure some steps to be skipped (see page 8 paragraph 114).

the administering of a current test-module including

executing the current test-module, the executing including sending signal bits to the external system. Gupton discloses collecting the execution results of the steps (see page 8 paragraph 114).

applying, if the current test-module is subject to one or more rules, such one or more rules. Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114).

In regards to claim 23, Gupton discloses the claim limitations as discussed above. Gupton further discloses

receiving commands to arrange a portion of the plurality of test-modules to create the sequence of test-modules. Gupton disclose a sequence editor may have a GUI for enabling a user to efficiently create a test executive sequence (see page 7 paragraph 108).

receiving commands to associate at least one condition and at least one action to at least one test-module of the sequence of test-modules. Gupton discloses a user may configure some steps to be skipped depending on execution results of previous steps (see page 8 paragraph 114).

In regards to claim 24 and 25, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein, the action is at least one of

sending a communication, wherein, the sending may be executed using at least one of mailing, Emailing, paging, and phoning.

aborting,

Art Unit: 2113

skipping a test-module in the test-module sequence,
repeating a test-module,
executing a test-module out of sequence, and
executing a program.

Gupton discloses skipping steps depending on the execution results of previous steps (see page 8 paragraph 114), indicating skipping a test-module in the test-module sequence and branching. Examiner notes since claim cites at least one, prior art needs only one of the features to meet the claim limitations.

In regards to claim 27, Gupton discloses the claim limitations as discussed above. Gupton further discloses associating a test-module identification value for each test-module of the sequence of test-module, the test-module identification value corresponding to the order of the test-module sequence. Gupton discloses creating a test executive sequence (see page 7 paragraph 108), and further defines a sequence as a series of steps that the user specifies for execution in a particular order (see page 1 paragraph 11). In order for a series of steps to execute in a particular order, there must be a value associated with each step or test module identifying its order in the sequence.

In regards to claim 28, Gupton discloses the claim limitations as discussed above. Gupton further discloses wherein the distilled results are determined based on a synthesis of values of the plurality of intermediate software-targeted testing-inquiry results. Gupton discloses skipping steps (distilled result) depending on the execution results of previous steps or intermediate results (see page 8 paragraph 114).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5,12,19, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupton in view of US Patent No. 5,220,658 of Kerr et al. referred hereinafter "Kerr".

In regards to claims 5,12,19, and 26, Gupton discloses the claim limitations as discussed above.

However, Gupton fails to explicitly disclose wherein, at least one of the test-modules is repeatedly administered until passing state information is returned.

Kerr discloses retesting or replaying steps to ensure the repair when an error is detected and corrected (see column 23 lines 40-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gupton and Kerr to retest or replay steps to ensure the repair when an error is detected and corrected, thus indicating wherein, at least one of the test-modules is repeatedly administered until passing state information is returned. A person of ordinary skill in the art would have been motivated to combine the teachings because Gupton is concerned with detecting and correcting errors on a system (see page 1 paragraph 5 "pass/fail results" and page 28 paragraph 530 and 538) and retesting or replaying steps, as per teachings of Kerr, ensure the repair when an error is detected and corrected (see column 23 lines 40-45).

Art Unit: 2113

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gupton in view of US Patent No. 6,988,139 of Jarvis et al. referred hereinafter "Jarvis".

In regards to claim 18, Gupton discloses the claim limitations as discussed above.

However, Gupton fails to explicitly disclose

wherein, the test management system sends at least one of an Email, page, and phone message.

Jarvis discloses running test suites and email the results (see column 14 lines 38-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gupton and Jarvis to email test results, thus indicating wherein, the test management system sends an email. A person of ordinary skill in the art would have been motivated to combine the teachings because Gupton is concerned to collecting execution results (see page 8 paragraph 114) and emailing, as per teachings of Jarvis, constitutes a commonly known means to sent results, thus enable the collection of the execution results.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C. Puente whose telephone number is (571) 272-3652.

The examiner can normally be reached on 8-5 M-F.

Art Unit: 2113

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Emerson Puente". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Emerson Puente
Examiner
AU 2113